

ABSTRACT OF THE DISCLOSURE

An inclining and rotating table apparatus comprises a rotating table device having a rotating table, and a support base
5 for rotatably supporting the rotating table having a shaft body provided perpendicular to a rotation axis of the rotating table, and a base for rotatably supporting the rotating table device using the shaft body. A table surface of the rotating table is inclined by making the rotating table device rotate. A first
10 V-shaped groove is directly formed in the shaft body along its rotating direction. The base has a second V-shaped groove opposing the first V-shaped groove. A cross roller bearing is structured by providing rolling bodies, which are placed in contact with the first and second V-shaped grooves and are capable
15 of rolling therebetween, between the shaft body and the base, and arranging a rolling axis of a rolling body perpendicular to that of an adjacent rolling body.